

# Contents

- Abdel-Rahman A-FM, Martin RF: The Mount Gharib A-type granite, Nubian Shield: Petrogenesis and role of metasomatism at the source 173-183
- Angel RJ → Carpenter MA 471-480
- Arculus RJ → Ruiz J 615-618
- Aubertin M → Turpin L 163-172
- Aurisicchio C → Trigila R 594-608
- Austrheim H → Jamveit B 184-193
- Baker DR: Chemical interdiffusion of dacite and rhyolite: anhydrous measurements at 1 atm and 10 kbar, application of transition state theory, and diffusion in zoned magma chambers 407-423
- Bauer RL → McCall GW 439-452
- Bechtel A, Hoernes S: Oxygen isotope fractionation between oxygen of different sites in ilite minerals: a potential single-mineral thermometer 463-470
- Bell K → Richardson JM 516-529
- Bickle MJ, Chapman HJ: Strontium and oxygen isotope decoupling in the Hercynian Trois Seigneurs Massif, Pyrenees: evidence for fluid circulation in a brittle regime 332-347
- Blenkinsop J → Richardson JM 516-529
- Blundy JD, Holland TJB: Calcic amphibole equilibria and a new amphibole-plagioclase geothermometer 205-224
- Bouchez J-L → Turpin L 163-172
- Boyd FR → Luth RW 56-72
- Brooks CK → McBirney AR 235-247
- Brophy JG: Andesites from northeastern Kanaga Island, Aleutians. Implications for calc-alkaline fractionation mechanisms and magma chamber development 566-581
- Brown WL → Worden RH 507-515
- Bucher-Nurminen K → Jamveit B 184-193
- Buseck PR → Sharp TG 530-539
- Cameron KL, Robinson JV: Comments on "Nd-Sr isotopic compositions of lower crustal xenoliths - Evidence for the origin of mid-Tertiary felsic volcanics in Mexico" by J. Ruiz, P.J. Patchett, and R.J. Arculus 609-614
- Canil D, Virgo D, Scarfe CM: Oxidation state of mantle xenoliths from British Columbia, Canada 453-462
- Carpenter MA, Angel RJ, Finger LW: Calibration of Al/Si order variations in orthite 471-480
- Chapman HJ → Bickle MJ 332-347
- Chappell BW → Jacques AL 255-276
- Chauvel C → Gruau G 27-34
- Clark SCL, Spera FJ: Evolution of the Miocene Tejada magmatic system, Gran Canaria, Canary Islands. Part II. Petrologic constraints 581-599
- Cliff RA → Huhma H 369-379
- Cole JW, Graham LJ, Gibson IL: Magmatic evolution of Late Cenozoic volcanic rocks of the Lau Ridge, Fiji 540-554
- Compston W → Kröner A 348-352
- Cuney M → Maruëjol P 666-680
- Cuney M → Turpin L 163-172
- Czamanske GK → Johnson CM 99-124
- DePaolo DJ → Stewart BW 125-141
- Doherty W → Lightfoot PC 631-644
- Eberz GW, Nicholls IA: Chemical modification of enclave magma by post-emplacement crystal fractionation, diffusion and metasomatism 47-55
- Elphick SC → Graham CM 481-491
- Fedorenko VA → Lightfoot PC 631-644
- Finger LW → Carpenter MA 471-480
- Fodor RV, Sial AN, Mukasa SB, McKee EH: Petrology, isotope characteristics, and K-Ar ages of the Maranhão, northern Brazil, Mesozoic basalt province 555-567
- Frey FA → Stern CR 294-308
- Friedrich M → Turpin L 163-172
- Futa K → Stern CR 294-308
- Ghiorsio MS: Thermodynamic properties of hematite - ilmenite - geikielite solid solutions 645-667
- Gibson IL → Cole JW 540-554
- Glascok MD → McCall GW 439-452
- Golberg JM, Leyreloup AF: High temperature-low pressure cretaceous metamorphism related to crustal thinning (Eastern North Pyrenean Zone, France) 194-207
- Gorbachev NS → Lightfoot PC 631-644
- Graham CM, Elphick SC: A re-examination of the role of hydrogen in Al-Si interdiffusion in feldspars 481-491
- Graham LJ → Cole JW 540-554
- Green DH → Mathey DP 492-505
- Grove TL → Kennedy AK 722-734
- Gruau G, Chauvel C, Jahn BM: Anomalous Sm-Nd ages for the early Archean Onverwacht Group Volcanics. Significance and petrogenetic implications 27-34
- Guiraud M, Holland T, Powell R: Calculated mineral equilibria in the greenschist-blueschist-eclogite facies in Na<sub>2</sub>O-FeO-MgO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub>-H<sub>2</sub>O. Methods, results and geological applications 85-98
- Guiraud M → Will TM 353-368
- Hertogen J → Pedersen RB 277-293
- Hickmott DD, Shimizu N: Trace element zoning in garnet from the Kwolek Area, British Columbia: disequilibrium partitioning during garnet growth? 619-630
- Hoernes S → Bechtel A 463-470
- Holsch TD: Empirical calibration of six geobarometers for the mineral assemblage quartz + muscovite + biotite + plagioclase + garnet 225-234
- Holland T → Guiraud M 85-98
- Holland T → Will TM 353-368
- Holland TJB → Blundy JD 205-224
- Huhma H, Cliff RA, Perttunen V, Sakko M: Sm-Nd and Pb isotopic study of mafic rocks associated with early Proterozoic continental rifting: the Peräpohja schist belt in northern Finland 369-379
- Hunter RH, Sparks RSJ: The differentiation of the Skaergaard Intrusion. Replies to A.R. MacBirney and H.R. Naslund, S.A. Morse, C.K. Brooks and T.F.D. Nielsen 248-254
- Ininger PD → Silver LA 142-162
- Jahn BM → Gruau G 27-34
- Jamveit B, Bucher-Nurminen K, Austrheim H: Fluid controlled eclogitization of granulites in deep crustal shear zones, Bergen arcs, Western Norway 184-193
- Jacques AL, O'Neill HStC, Smith CB, Moon J, Chappell BW: Diamondiferous peridotite xenoliths from the Argyle (AK1) lamproite pipe, Western Australia 255-276
- Johannes W → Puziewicz J 397-406
- Johnson CM, Lipman PW, Czamanske GK: H, O, Sr, Nd, and Pb isotope geochemistry of the Latir volcanic field and co-genetic intrusions, New Mexico, and relations between evolution of a continental magmatic center and modifications of the lithosphere 99-124
- Johnson RW → Kennedy AK 722-734
- Kennedy AK, Grove TL, Johnson RW: Experimental and major element constraints on the evolution of lavas from Lihir Island, Papua New Guinea 722-734
- Kröner A, Compston W: Archean tonalitic gneiss of Finnish Lapland revisited: zircon ion-microprobe ages 348-352
- Kyser TK → Stern CR 294-308
- Leyreloup AF → Golberg JM 194-207
- Lightfoot PC, Naldrett AJ, Gorbachev NS, Doherty W, Fedorenko VA: Geochemistry of the Siberian Trap of the Noril'sk area, USSR, with implications for the relative contributions of crust and mantle to flood basalt magmatism 631-644
- Lipman PW → Johnson CM 99-124
- Liu T-C, Presnall DC: Liquidus phase relationships on the join anorthite-forsterite-quartz at 20 kbar with applications to basalt petrogenesis and igneous sapphirine 735-742
- Luth RW, Virgo D, Boyd FR, Wood BJ: Ferric iron in mantle-derived garnets. Implications for thermobarometry and for the oxidation state of the mantle 56-72
- Martin RF → Abdel-Rahman A-FM 173-183
- Maruëjol P, Cuney M, Turpin L: Magmatic and hydrothermal R.E.E. fractionation in

- the Xihuashan granites (SE China) 688-690
- Mattey DP, Taylor WR, Green DH, Pillinger CT: Carbon isotopic fractionation between  $\text{CO}_2$  vapour, silicate and carbonate melts: an experimental study to 30 kbar 492-505
- McBirney AR, Naslund HR, Morse SA, Brooks CK, Nielsen TFD: The differentiation of the Skaergaard intrusion. Discussions of Hunter and Sparks (Contrib Mineral Petrol 95:451-461): 235-247
- McCalli GW, Nabelek PI, Bauer RL, Glascock MD: Petrogenesis of Archean lamprophyres in the southern Vermilion Granitic Complex, northeastern Minnesota, with implications for the nature of their mantle source 439-452
- McKee EH  $\rightarrow$  Fodor RV 555-567
- Meen JK: Elevation of potassium content of basaltic magma by fractional crystallization: the effect of pressure 309-331
- Mengel K: Crustal xenoliths from Tertiary volcanics of the Northern Hessian Depression. Petrological and chemical evolution 5-26
- Miyake A: Dendritic cordierite in argillaceous hornfels from the Toki area, Gifu Prefecture, central Japan 390-396
- Moon J  $\rightarrow$  Jacques AL 255-276
- Morse SA  $\rightarrow$  McBirney AR 235-247
- Mukasa SB  $\rightarrow$  Fodor RV 555-567
- Nabelek PI  $\rightarrow$  McCalli GW 439-452
- Nakajima T, Shirahase T, Shibata K: Along-arc lateral variation of Rb-Sr and K-Ar ages of Cretaceous granitic rocks in Southwest Japan 381-389
- Naldrett AJ  $\rightarrow$  Lightfoot PC 631-644
- Naslund HR  $\rightarrow$  McBirney AR 235-247
- Nicholls IA  $\rightarrow$  Eberz GW 47-55
- Nielsen TFD  $\rightarrow$  McBirney AR 235-247
- Nishiyama T:  $\text{CO}_2$  metasomatism of a metabasite block in a serpentine melange from the Nishisonogi metamorphic rocks, southwest Japan 35-46
- O'Neill HSC  $\rightarrow$  Jacques AL 255-276
- Ottens MT  $\rightarrow$  Sharp TG 530-539
- Parsons I  $\rightarrow$  Worden RH 507-515
- Patchett PJ  $\rightarrow$  Ruiz J 615-618
- Pearce TH  $\rightarrow$  Stamatiopoulou-Seymour K 73-84
- Pedersen RB, Heriogen J: Magmatic evolution of the Karmøy Ophiolite Complex, SW Norway: relationships between MORB-IAT-boninitic-calc-alkaline and alkaline magmatism 277-293
- Peng Z  $\rightarrow$  Stern CR 294-308
- Perfit MR  $\rightarrow$  Romick JD 700-721
- Perttunen V  $\rightarrow$  Huhma H 369-379
- Pillinger CT  $\rightarrow$  Mattey DP 492-505
- Powell R  $\rightarrow$  Guiraud M 85-96
- Powell R  $\rightarrow$  Will TM 353-368
- Presnell DC  $\rightarrow$  Liu T-C 735-742
- Puziewicz J, Johannes W: Experimental study of a biotite-bearing granitic system under water-saturated and water-undersaturated conditions 397-406
- Rice C  $\rightarrow$  Stamatiopoulou-Seymour K 73-84
- Richardson JM, Blenkinsop J, Bell K: Extreme variations in strontium initial ratios in ore-related fluids: Fluorite and phosphate minerals from the greisen-style East Kemptville tin mine, Nova Scotia, Canada 516-529
- Robinson JV  $\rightarrow$  Cameron KL 609-614
- Romick JD, Perfit MR, Swanson SE, Shuster RD: Magmatism in the eastern Aleutian Arc: temporal characteristic of igneous activity on Akutan Island 700-721
- Ruiz J, Patchett PJ, Arculus RJ: Reply to "Comments on Nd-Sr isotopic compositions of lower crustal xenoliths - Evidence for the origin of mid-Tertiary felsic volcanics in Mexico" by K.L. Cameron and J.V. Robinson 615-618
- Sakko M  $\rightarrow$  Huhma H 369-379
- Scarfe CM  $\rightarrow$  Canil D 453-462
- Schliestedt M  $\rightarrow$  Wijbrans JR 582-593
- Sharp TG, Otten MT, Buseck PR: Serpentinization of phlogopite phenocrysts from a micaceous kimberlite 530-539
- Shibata K  $\rightarrow$  Nakajima T 381-389
- Shimizu N  $\rightarrow$  Hickmott DD 619-630
- Shirahase T  $\rightarrow$  Nakajima T 381-389
- Shuster RD  $\rightarrow$  Romick JD 700-721
- Sial AN  $\rightarrow$  Fodor RV 555-567
- Silver LA, Ihinger PD, Stolper E: The influence of bulk composition on the speciation of water in silicate glasses 142-162
- Smith CB  $\rightarrow$  Jacques AL 255-276
- Sparks RSJ  $\rightarrow$  Hunter RH 248-254
- Spera FJ  $\rightarrow$  Clark SC 681-699
- Spera FJ  $\rightarrow$  Triglia R 594-608
- Stamatiopoulou-Seymour K, Vlassopoulos D, Pearce TH, Rice C: The record of magma chamber processes in plagioclase phenocrysts at Thera Volcano, Aegean Volcanic Arc, Greece 73-84
- Stern CR, Frey FA, Futa K, Zartman RE, Peng Z, Kyser TK: Trace-element and Sr, Nd, Pb, and O isotopic composition of Pliocene and Quaternary alkali basalts of the Patagonian Plateau lavas of southernmost South America 294-308
- Stewart BW, DePaolo DJ: Isotopic studies of processes in mafic magma chambers: II. The Skaergaard intrusion, East Greenland 125-141
- Stolper E  $\rightarrow$  Silver LA 142-162
- Swanson SE  $\rightarrow$  Romick JD 700-721
- Taylor WR  $\rightarrow$  Mattey DP 492-505
- Triglia R, Spera FJ, Aurisicchio C: The 1983 Mount Etna eruption: thermochemical and dynamical inferences 594-608
- Turpin L, Cuney M, Friedrich M, Bouchez J-L, Aubertin M: Meta-igneous origin of Hercynian peraluminous granites in N.W. French Massif Central: implications for crustal history reconstructions 163-172
- Turpin L  $\rightarrow$  Maruël J P 668-680
- Virgo D  $\rightarrow$  Canil D 453-462
- Virgo D  $\rightarrow$  Luth RW 56-72
- Vlassopoulos D  $\rightarrow$  Stamatiopoulou-Seymour K 73-84
- Walker FDL  $\rightarrow$  Worden RH 507-515
- Webster JD: Partitioning of F between  $\text{H}_2\text{O}$  and  $\text{CO}_2$  fluids and topaz rhyolite melt. Implications for mineralizing magmatic-hydrothermal fluids in F-rich granitic systems 424-436
- Wijbrans JR, Schliestedt M, York D: Single grain argon laser probe dating of phenogites from the blueschist to greenschist transition on Sifnos (Cyclades, Greece) 582-593
- Will TM, Powell R, Holland T, Guiraud M: Calculated greenschist facies mineral equilibria in the system  $\text{CaO}-\text{FeO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2-\text{CO}_2-\text{H}_2\text{O}$  353-368
- Wood BJ  $\rightarrow$  Luth RW 56-72
- Worden RH, Walker FDL, Parsons I, Brown WL: Development of microporosity, diffusion channels and deuteric coarsening in perthitic alkali feldspars 507-515
- York D  $\rightarrow$  Wijbrans JR 582-593
- Zartman RE  $\rightarrow$  Stern CR 294-308

